

eAppendix.

Locomotor Experience Applied Post Stroke (LEAPS) Procedures for 10-Meter Walk Test and Modified Rankin Scale

10-Meter Walk Test

Procedure:

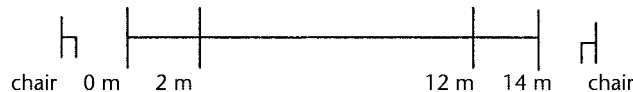
Description: The 10-Meter Walk Test is a measure of gait speed.

Equipment: Digital stopwatch, measuring tape, masking tape, quiet hallway or open space at least 14 m long

Note: The participant should be wearing flat shoes or shoes with a heel less than ½ inch. Otherwise, the participant should walk with well-fit hospital slippers. Have the participant perform this test with his or her most often used assistive device or brace.

Administration:

1. A measured course indoors is established with a length of 14 m. Lines are drawn with tape at 0, 2, 12, and 14 m.



2. With the participant seated, measure the participant's resting heart rate and blood pressure. Do not start the test if the participant's blood pressure is 180/100 mm Hg or his or her heart rate is greater than 100 bpm or 80% of predicted maximum heart rate (estimated as 220 – age).
3. Give the participant the following information: "You are going to walk a distance of about 40 feet. We will repeat this distance 2 times. Both times will be completed at your *comfortable pace*. Do you have any questions?"
4. Have the participant proceed to the start line (0 m). Before the first trial, tell the participant, "You are going to walk at a comfortable pace to the chair. (Use appropriate descriptor of chair/location as needed but *do not* refer to the tape on the floor.) Continue walking until I saw 'STOP.' The start command will be 'Ready and Go.'"
5. When you and the participant are ready, say, "Ready and Go." If the participant starts too early, have him or her start again.
6. Start the stopwatch when the participant's first foot crosses the plane of the 2-m line, and stop the stopwatch when the participant's first foot crosses the plane of the 12-m line. Have the participant continue walking until he or she reaches the chair after the 14-m line.
7. Record the time (in seconds to the hundredths) it took for the participant to walk the 10-m distance between the 2-m line and the 12-m line.
8. Have the participant rest, if needed, in the chair at the 14-m line.
9. The participant is going to repeat the *exact same* procedure as described above at a "comfortable pace," except he or she will be walking from the 14-m line to the 0-m line. Start the stopwatch at the 12-m line, and stop the stopwatch at the 2-m line.
10. Record the time (in seconds to the hundredths) for the second trial at a "comfortable pace." The participant can rest, if needed, in the chair at the 0-m line.
11. Immediately take the participant's pulse and blood pressure when he or she is sitting in the chair.
12. Record assistive device, type of ankle-foot orthosis (if appropriate)

(Continued)

Modified Rankin Scale**Procedure:**

Description: The modified Rankin Scale is a functional outcome measure of stroke that reflects the participant's overall level of disability.

Equipment: None

Administration:

1. As the modified Rankin Scale score is your overall impression of the participant's level of disability after stroke, it is determined based upon your interview and observation of the participant over the screening or evaluation process. Interview the participant or a person who is familiar with the participant's daily routine prior to the stroke.
2. Determine the appropriate score by asking about:
 - (a) assistance to perform activities of daily living, including assistance to dress or walk,
 - (b) assistance to look after own affairs such as preparing a simple meal, ability to travel locally, or manage expenses,
 - (c) assistance to engage in usual duties and activities such as work, family, or social activities, and
 - (d) any residual symptoms since the stroke.
3. From the interview and clinical observations, score the participant as follows:

	Modified Rankin Scale	From Interview
0	No symptoms at all	
1	No significant disability: despite symptoms, able to carry out all usual duties and activities	Engages fully in all previous activities, but may have residual symptoms of stroke
2	Slight disability: unable to carry out all previous activities but able to look after own affairs without assistance	Change in social roles related to work or social engagement
3	Moderate disability: requiring some help, but able to walk without assistance	May use assistive device but no physical assistance
4	Moderately severe disability: unable to walk without assistance and unable to attend to own bodily needs without assistance	Assistance includes physical assistance or verbal instruction by another person
5	Severe disability: bedridden, incontinent, and requiring constant nursing care and attention	Constant care: usually bedridden, moving from bed to sitting requires major assistance